## REGISTERED COMPANY NUMBER: 06399500 (England and Wales) **REGISTERED CHARITY NUMBER ENGLAND AND WALES: 1124533 REGISTERED CHARITY NUMBER SCOTLAND: SC044434**

Report of the Trustees and Audited Financial Statements for the Year Ended 31 March 2017 for

> **Medical Detection Dogs** (A Company Limited by Guarantee)

Ashby's Chartered Accountants Statutory Auditor Morton House 9 Beacon Court Pitstone Green Business Park Pitstone LU7 9GY



**COMPANIES HOUSE** 

16/12/2017

# Financial Statements for the year ended 31st March 2017

## Contents

Section	Page
Report of the Trustees	3 to 20
Report of the Independent Auditors	21 to 22
Statement of Financial Activities	23
Balance Sheet	24
Cash Flow Statement	25
Notes to the Cash Flow Statement	26
Notes to the Financial Statements	27 to 37

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

The trustees who are also directors of the charity for the purposes of the Companies Act 2006, present their report with the financial statements of the charity for the year ended 31 March 2017. The trustees have adopted the provisions of Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective January 2015).

#### REFERENCE AND ADMINISTRATIVE DETAILS

## **Registered Company number**

6399500 (England and Wales)

## **Registered Charity number**

1124533

4

## **Registered office**

Unit 3, Millfield Greenway Business Park Winslow Road Great Horwood Milton Keynes, MK17 0NP

#### **Trustees**

The Hon. Mrs Elizabeth Duncan Smith (Chairman)
Dr Victoria Hordern
Andrew Keegan
Dr Alan Makepeace – appointed 31 October 2016
Peter Mimpriss CVO
Dr John Church – retired 7 December 2016
John Guest - retired 11 September 2016
Michael Brander – retired 7 December 2016
Dr Carol Tang – retired 15 February 2017
Susan Brealey – appointed 17 June 2016, retired 3 April 2017

#### **Honorary Treasurer**

Andrew Keegan ACMA, CGMA

## **Chief Executive and Director of Operations**

Dr Claire Guest BSc (Hons) MSc HonDSc DHP BCAh

### **Chief Operating Officer**

Daniel Howard

### **Company Secretary**

Andrew Whitby-Collins

### **Independent Auditor**

Ashby's Chartered Accountants Morton House 9 Beacon Court Pitstone Green Business Park Pitstone, LU7 9GY

### **Bankers**

CAF Bank Limited 25 Kings Hill Avenue Kings Hill, West Malling Kent, ME19 4JQ HSBC Bank plc 22 West Street Dunstable

Bedfordshire, LU6 1SY

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

#### **COMMENCEMENT OF ACTIVITIES**

The charitable company was incorporated on 15th October 2007 and commenced charitable activities immediately.

#### STRUCTURE GOVERNANCE AND MANAGEMENT

#### **Governing Document**

The Charity is controlled by its governing document, the amended Memorandum and Articles of Association dated 11 October 2013. It is a company limited by guarantee as defined by the Companies Act 2006.

#### **Recruitment and Appointment of New Trustees**

New Trustees may be appointed by the Charity at a general meeting or by the Board of Trustees. The method of recruiting new Trustees is to approach suitable people known to be highly supportive of the Charity and who possess the skills and attributes that the Board has determined are necessary for the effective oversight and governance of the Charity. The test of suitability is based not only on character and ability but on the value the person can, by background or calling, add to the Board of Trustees.

The policies and procedures for the induction and training of a new Trustee are that, before appointment, the person is invited to meet with Trustees and senior staff and given an opportunity to become fully familiar with the Charity's work, staff etc. The potential trustee discusses the factors involved in becoming a new Trustee and is supplied with any documents requested. He/she then attends a meeting of the Board of Trustees at the end of which (if he/she confirms a willingness to serve) a decision concerning his/her appointment is made. The Declaration of Eligibility etc. are then completed before the appointment takes effect. The Charity ensures that the new Trustee has access to a copy of the Memorandum and Articles of Association and previous Reports and Accounts and that he or she has read Charity Commission guidance regarding the duties of trustees.

## Structure and Management

The charity is divided into two arms 1) Cancer Research and Bio-detection and 2) Medical Alert Assistance dogs. Details of the work done by these two arms are given in the performance section below. All policy decisions are taken by the Trustees and day to day management decisions are taken by the Chief Executive and Chief Operating Officer. Sometimes ad hoc panels of Trustees are appointed to take specific decisions.

## **Remuneration Policy for Senior Staff**

Remuneration for the Chief Executive and senior staff is reviewed annually by the Trustees. The review will take into account any general pay increase to staff, benchmarking of similar roles in similar charity organisations and pre-agreed performance criteria. Trustees do not receive any remuneration and give their time freely.

#### **Risk Management**

The Trustees have a duty to identify and review the risks to which the Charity is exposed and to ensure appropriate controls are in place to provide reasonable assurance against fraud and error. The Trustees have actively reviewed the major operational and business risks that the Charity faces and confirm that systems have been established to mitigate any significant risks. The Charity has a Vulnerable Adults Policy and a Child Protection Policy in place and all relevant staff and volunteers have been through a CRB check. All staff receive appropriate training and all of our child client assistance dogs are placed as 'Team Dogs' working as part-of-the-family.—Placement-of-the-dog\_therefore\_always\_involves members of the family and a nominated adult 'team leader.'

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

#### **OBJECTIVES AND ACTIVITIES**

#### **Objectives and Aims**

The Charity's objects (the Objects) are:

- (a) To conduct research into the detection, recognition and diagnosis of diseases and medical conditions by the use of dogs and other animals trained in the recognition of relevant stimuli, and the publication of such research for the public benefit; and
- (b) The relief of sickness and the protection of health for the public benefit, by the detection, recognition and diagnosis of diseases and medical conditions, by the use of dogs trained in the recognition of relevant stimuli.

In relation to (a) the Charity has continued to conduct research into the early diagnosis of cancer and other human diseases and a number of research papers have been published.

In relation to (b) the Charity has ongoing assistance dog projects and continues to expand the number of conditions it trains dogs to alert to and to investigate the possibility of a project to provide a secondary testing service by diagnosing cancer and other human diseases from samples sent by hospitals.

#### **CHARITABLE ACTIVITIES**

#### **Achievements and Performance**

### **Highlights**

Medical Detection Dogs continues to go from strength to strength and as we approach our tenth birthday we are excited about the increasing potential of our work to improve the quality of people's lives. Our urological cancer study, which is a three-year collaboration with Milton Keynes University Hospital NHS Trust that obtained NHS clinical approval last year is progressing. The results of this and our other trials, some of which are explained in more detail below, will be of huge importance to the future of cancer detection in the UK and, we hope, internationally.

Since our initial research into the potential of dogs to detect the odour of cancer it has become clear that they are able to detect the odour of many other human diseases. Over the past year we have continued to investigate the possibility of expanding our research work into other areas, notably Malaria, Parkinson's disease and the bacterium Pseudomonas and we are encouraged by the initial results. We will continue to develop these exciting areas of research in the coming year.

During the year we were reaccredited by Assistance Dogs International as a recognised provider and trainer of accredited assistance dogs. Our Medical Alert Assistance Dogs continue to be in great demand and we are incredibly proud to have placed our 100<sup>th</sup> dog this year, Trinity, who is making a huge difference to Jackie's life as we explain in more detail below.

However, there is still a waiting of between two and a half and three years for a life-saving medical alert assistance dog. We continue to work hard to reduce the waiting list and have ambitious targets to increase the number of dogs in training and placed with clients. Last year we again succeeded in meeting our target and increased the number of dogs placed in the year by a third from 18 to 24. Our ability to continue to grow at this rate is hampered by a lack of capacity, both in terms of physical space and fundraising. We are taking steps to address both of these points as is explained in more detail below, but as a consequence our target for next year is to increase to 29 dogs placed.

We continue to be grateful for the patronage of Her Royal Highness the Duchess of Cornwall whose support for our work is hugely appreciated. Over the past year, in addition to our regular programme of open days, we have met with or welcomed to our headquarters a number of influential people, including Dr Axel Heitmueller from Imperial College Health Partners. We also had an exhibition stand at the All Party Parliamentary Group on Cancer - Britain Against Cancer annual meeting and carried out numerous demonstrations including at the Wellcome Trust, Stowe School and the Open University.

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

The charity continues to attract a considerable amount of media interests, both in the UK and internationally. One highlight of the past year was the report about us on the BBC Victoria Derbyshire show, which included a commitment from the Health Secretary to look seriously at the results of our research. It generated a great deal of interest and is well worth watching for its explanation of our work and its potential. You can find it here: http://www.bbc.co.uk/programmes/p04wpnt7

Also over the past year we have also featured on BCC Radio 4 Inside Science, BBC News, BBC World Service, BBC South Today, ITV This Morning, ITV Good Morning Britain, Channel 5CNBC, CNN, CCTV Africa and a number of regional radio stations, as well as the Daily Mail, the Independent, the Sun, Daily Express, Mail Online, Daily Mirror, the Irish Times and a host of regional publications.

Following the review last year of our organisational structure to ensure that our operational activities, which are carried out for the benefit of the public, are supported by an efficient and effective organisation, the Trustees decided to appoint a Chief Operating Officer to support me in the day-to-day management of the charity. After a careful recruitment process which prompted applications from some excellent candidates we were delighted that Daniel Howard OBE joined us at the beginning of 2017.

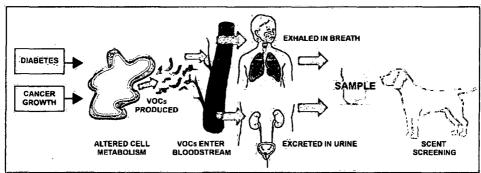
We were also delighted to welcome human super-sniffer and successful entrepreneur Jo Malone as an Ambassador.

Dr Guest, Chief Executive and Director of Operations

#### **BIO-DETECTION**

### Some Facts and Statistics regarding our Bio Detection Dogs

During the normal processes of the body, metabolic changes occur constantly; however, in cancer development these metabolic processes are altered. Increased oxidative stress leads to the formation of reactive oxygen species and free radicals. These generate volatile organic compounds (VOCs), such as alkanes and alkenes that diffuse into the bloodstream and are then excreted in the breath or in the urine.



VOCs = volatile organic compounds

We are conducting research aimed at improving the ability to diagnose cancer and other human diseases at an early stage. As most will know from experiences with family and friends, timely diagnosis of cancer, particularly in the UK, remains frighteningly poor. Tens of millions of pounds has been spent trying to develop better methods but for many cancers there is no real evidence of improved screening. Take the example of prostate cancer, a major killer in men. If a man's prostate is found to be enlarged (easily discovered by a GP) the only screening test a doctor has been able to recommend is the PSA test. However, this test has significant limitations, as identified by the National Cancer Institute:

'False-positive tests: False-positive test results (also called false positives) occur when the PSA level is elevated but no cancer is actually present. False positives may lead to additional medical procedures that have potential risks and significant financial costs and can create anxiety for the patient and his family. Most

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

men with an elevated PSA test result turn out **not** to have cancer; only 25 to 35 per cent of men who have a biopsy due to an elevated PSA level actually have prostate cancer.'

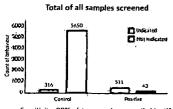
In other words the PSA test leads to countless unnecessary and potentially damaging procedures. There is an urgent need for a more reliable test. We can help. Our team have proved that dogs can detect bladder cancer by sniffing a urine sample (BMJ September 2004). We know from subsequent studies that they can detect cancer to a high degree of accuracy. We believe that our work will assist other scientists to isolate the volatiles that the dogs smell.

In 2011 we completed a further study entitled 'Volatile organic compounds as biomarkers of bladder cancer: sensitivity and specificity using trained sniffer dogs', which was published in Cancer Biomarkers (2011). As with our 2004 study, this was carried out under the strictest double blind conditions (i.e. the dog handlers had no idea themselves which samples were controls). Although unfortunately it became apparent during the trial that the constraints of the trial structure imposed by our funder were having an adverse behavioural effect on the dogs' performance as the trial progressed, nevertheless the trial demonstrated that our specialist cancer dogs as a group could correctly distinguish a cancer sample from a control 64% of the time: the best dogs managed 73%. One dog managed a detection rate of 100% (on grade one stage one tumours) albeit there were some false positives.

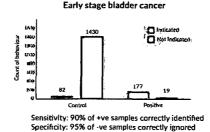
We are confident that a much improved rate of success can be achieved by using improved methods. No screening test will ever be 100 % accurate but we are confident that a method of detecting volatiles can do much better than, for instance, the current PSA test. Recent analysis of the performance of our dogs has indicated that over a five-year period our best dog has achieved an overall sensitivity of 95% and specificity of 93%.

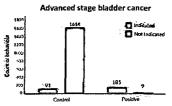
Daisy, a Labrador, is shown at work screening bladder cancer samples by smell. The overall sensitivity (i.e. sick people correctly diagnosed as sick) and specificity (i.e. healthy people correctly identified as healthy) scores were very high (>90% each); the sensitivity score achieved by Daisy working on advanced cancers was greater than that for screening early cancers, whereas the specificity score was the same for both groups. These figures were calculated using results from both training and testing and may represent some repeated samples. However these results shows the huge potential of this work. Although a perfect predictor would be described as 100% sensitive (i.e. predicting all people from the sick group as being sick) and 100% specific (i.e. not predicting anyone from the healthy group as being sick) no one diagnostic test currently achieves this level of accuracy.





Sensitivity: 93% of +ve samples correctly identified Specificity: 95% of -ve samples correctly ignored





Sensitivity: 95% of +ve samples correctly identified Specificity: 95% of -ve samples correctly ignored

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

In the charity's early years many medics doubted our ability to help with cancer diagnosis despite the scientific facts pointing in the opposite direction. However our credibility has grown apace recently due to the further studies we have carried out and also, it has to be said, with the help of successes abroad. Our September 2004 BMJ report (referred to above), which was the first scientifically based paper on the subject of dogs detecting cancer by smell, has been very widely read and has led to many studies being carried out across the world. The dogs have a scenting ability that exceeds that of any machine, and our team is supported by an increasing number of medics and academics, including leading oncologist Professor Karol Sikora.

#### Recent project highlights

We are focussed on developing the work we have outlined above through rigorous ethically approved clinical studies that we are confident will demonstrate to the required standard and with a sufficient body of evidence that dogs' sense of smell can play a significant role in the early detection of disease. Early diagnosis should lead to improved survival rates because of earlier medical intervention and also give improved quality of life. We set out below some of the developments over the past year.

### **Urological Cancer Study**

This study, which will look at bladder, prostate and renal cancers, with an initial focus on prostate cancer, is being carried out in collaboration with Milton Keynes University Hospital NHS Trust. It has three phases and moves us towards using dogs as a possible additional detection service.

First Phase: Proof of Principle for the detection of prostate cancer via human urine.

Second Phase: Clinical Trial – Milton Keynes NHS Hospital Trust will supply the charity with patient samples as the clinician undertakes normal clinical diagnosis. The collection and use of the samples is subject to strict ethical procedures and protocols and the results will be compared at the conclusion of the diagnostic procedure.

Third Phase: Longitudinal Study –investigating the viability of dogs to provide second-line testing when the initial current investigation has produced an equivocal result. It is this part in particular which will give an indication of the possibility of a clinical application in the future.

Having achieved the relevant ethical approvals, sample collection at Milton Keynes University Hospital is underway and we are training the dogs in phase 1. Sample collection remains slow, despite concerted efforts by all involved. It has been agreed that two additional hospital sites will be recruited, thereby increasing the rate of patient recruitment and sample provision. The site NHS regulatory and ethical approvals, and the site recruitment and training process will mean that samples are unlikely to be arriving from the new sites until early 2018. As a consequence the study duration is being extended until 2019. This will hopefully enable us to collect the sample numbers necessary to train the dogs and test on a high number of samples.

We are also grateful for the continued support of Tackle Prostate, Gary Steel and the Graham Fulford Charitable Trust who organise 'walk in' independent PSA testing clinics around the UK. They encourage men to donate samples for our canine training and demonstration purposes, which are collected in accordance with the strict criteria for doing so.

#### **Breast Cancer Study**

Unfortunately the lack of research resources for the study at Bucks NHS Trust has meant that the study has closed at—this—site.—Coupled with the ongoing challenges of collecting, storing and using breath samples (something which is acknowledged by other research groups worldwide as being fraught with difficulties), we are taking this opportunity to fully revise the study protocol, in collaboration with clinicians at the Milton Keynes University Hospital. We plan to restart the study using this revised protocol (collecting skin contact pads and urine samples) at this site as soon as their research resources permit. The vision is to then extend this study to other NHS sites, including Bucks NHS Trust, as local resources permit.

We remain committed to our work in breast cancer aimed at adding to and improving the diagnostic screening process, which currently results in high levels of both over- and under-diagnosis.

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

#### Parkinson's Disease - Proof of Principle Study

A great deal of evidence exists to suggest that there is a distinctive change in body odour associated with the onset of Parkinson's Disease, and that this is detectable by humans who have exceptional levels of olfactory function. Affecting one in every 500 people in the UK, Parkinson's disease is a progressive, neurological degenerative disease that is incredibly difficult to diagnose. No definitive diagnostic test currently exists, and by the time patients present with symptoms, over 50% of the relevant brain cells have already been lost. Finding a chemical odour associated with the disease could have a huge impact on both individual patients (who would be able to access treatments to help control symptoms sooner), and on the research effort to develop treatments that could slow or even stop the disease process.

Over the past year we have been working with scientists at the Universities of Manchester and Edinburgh to progress this study and work is now scheduled to commence in summer 2017. We will be using skin swabs taken from individuals suffering from Parkinson's disease and from those without the disease to train and then test the dogs. Scientists in Manchester will be testing duplicate swabs with mass spectrometry in parallel, to try and identify and isolate the volatiles associated with the disease. This project is a prime example of how by working together with the e-nose scientists we can progress the science at a faster rate than by working in isolation.

The project is part funded by Parkinson's UK and the Michael J Fox Foundation.

#### Malaria

Malaria remains a huge worldwide public health concern. In 2015 there were 212 million cases of malaria, and 429,000 deaths. In 2016, nearly half of the world's population was at risk of malaria.

We are collaborating with Durham University, the London School of Hygiene & Tropical Medicine and the Medical Research Council Unit The Gambia, to find a way of detecting malaria that is non-invasive and can be used to test a large number of samples at a time. Current tests require finger-prick blood collection and laboratory screening. In contrast, the dogs are portable and rapid. Exciting qualitative work in The Gambia is ongoing assessing the acceptability and feasibility of a malaria sniffer dog, which could be used to screen large numbers of people at borders, for example.

During the past year samples have been collected from school children in The Gambia. Although samples are lower in number than we are used to working with, this proof of concept study will follow those conducted in mosquitos, which have shown that mosquitos use odour to identify individuals already infected with the parasite.

This research is part funded through the Grand Challenges Explorations initiative from the Bill & Melinda Gates Foundation, including a contribution to cover some of our costs for the dog work. Samples should arrive in summer 2017 when dog training will commence.

### Bacteria - Pseudomonas

We are very excited by the progress of this hugely innovative project which takes the novel approach of using cultured bacteria samples to train the dogs, rather than clinical samples. This provides the advantage of training the dogs on a 'pure' source of the target odour, before it is presented in a clinical sample (sputum, saliva) and all the associated complications this brings with it for olfactory detection.

Working with academic and clinical collaborators at Imperial College, London, we are training dogs to identify the odour of the bacterium Peusdomonas aeruginosa. This bacteria although common in the environment and poses little threat to healthy individuals, has the propensity to cause life-threatening respiratory tract infections in those with compromised immunity lung function. It is the key bacterial agent of cystic fibrosis (CF) lung infections, and the most important pathogen in progressive, severe and life-threatening CF lung disease. It is a resilient and resistant infectious agent resulting in difficulties in effective treatment. Swift identification of Pseudomonas infections in such individuals would result in quicker access to effective treatment. Traditional microbiology identification can take days, so an instant, odour-based detection process would make a huge difference.

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

Training of the dogs is going extremely well, and we will be undertaking an interim double blind testing phase in the summer of 2017. This data will be used by our collaborators to lever funding for a larger scale clinical trial, moving to using clinical samples.

If successful, the potential opportunities for using a similar system for the detection of other bacteria, such as C. diff and bacteria responsible for urinary tract infections for example, are endless. This is an area that we are hoping will provide a massive opportunity for growth in our research portfolio.

#### **Detection Sensitivity Research**

We are collaborating with the Open University's animal-computer interaction laboratory to investigate mechanisms, which will help us better understand the dogs' reactions to samples and improve communication between a handler and working dogs. Together with the university, we have designed and built prototype interactive scent stands which record the intensity of the dogs reaction to the sample and we hope will enable us to record not only a yes/no indication of the presence of cancer or other disease volatiles but the certainty with which the dog has detected their presence. The University has now secured funding for a PhD studentship and we hope that an appointment will be made in the next academic year.

We remain very excited about this innovative project; we believe that the progress we are making will provide a revolutionary means of communicating the dog's response to an olfactory stimulus. This improvement will lead to more reliable interpretation of the dog's behaviour and higher levels of sensitivity, but also will improve canine welfare in the future. This project has been causing considerable worldwide interest already in the field of canine olfactory detection.

### **Colorectal Cancer Study**

In partnership with a respected and experienced (and enthusiastic) clinician at Hull & East Yorkshire Hospitals NHS Foundation Trust, we are continuing to develop the colorectal cancer study. Once all the necessary NHS regulatory and ethical arrangements are in place, sample collection (urine and faecal fluid) will start later in 2017, with dog training starting a year later. Like many cancers, outcomes are significantly improved when colorectal cancer is diagnosed earlier. The current screening programme is not ideal, and relies on the Faecal Occult Blood Test. Uptake of this test is low (50-58%), and is predicted to rise if a more socially acceptable urine sample could be used instead.

There has been a great deal of media interest in this study, which, in the absence of external funding, should help fundraising to cover our costs.

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

#### **MEDICAL ALERT ASSISTANCE**

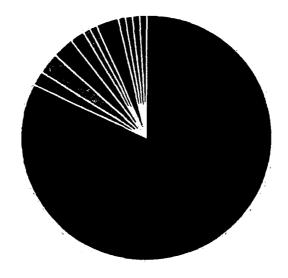
### An explanation of our work

Our assistance dogs help people living with a number of complex and life-threatening health conditions to live more independently and with a reduced need for medical interventions and hospitalisations. We started training dogs to identify changes in the blood glucose levels of people suffering from brittle/aggressive diabetes and/or poor awareness of dangerously low blood sugar (hypoglycaemia). The dogs are trained to be highly sensitive to glucose levels, they warn the client when levels deviate from the normal range, and can indicate changes within one or two millimoles of blood sugar. Normally the dogs are trained to alert to blood sugar levels below 4.5 but above 3 (millimoles per litre) and also alert to high blood sugars at the level chosen by the client (normally above 10 to 12 millimoles per litre).

Diabetes and its complications currently account for 10% (£9.8bn) of NHS spending. This is projected to rise to £16.9bn over the next 25 years, or 17% of the health service's funds. 10% of all admissions are diabetic related and this rises to 20% in some age groups. This equates to 80,000 bed days per year at £400 per day for the bed alone. 999 calls from diabetics cost the NHS £22 million a year. Our work therefore not only improves the well-being and quality of life of our client but also saves money for the NHS.

Diabetes sufferers continue to form the majority of our clients, however, we continue to expand the range of conditions that we are able to train dogs to help with. As you can see from the diagram below, these include Addison's disease, Postural Tachycardia Syndrome (PoTS) and an airborne nut detection dog, the first of its kind in the world.

## **Total Placements by Medical Condition**



- Blood Glucose
- Nut Allergy
- \* POTS

- Anaphylaxis
- Heart condition
- Complicated Migraines

- Narcolepsy
- Addisons
- CCHS

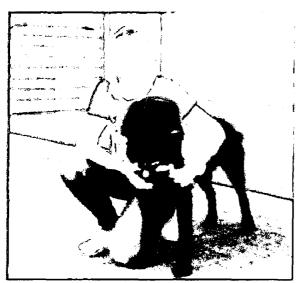
- Epileptiform
- Drop Attacks
- Idiopathic Pancreatitis

Diagram 1: Conditions which we have trained dogs to assist with

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

We are working towards greater measurement of the impact that our assistance dogs have, not only to the client with whom they are partnered, but quantitative measurement of the cost savings to the NHS and the wider economic benefits. The qualitative impact of our work is evident from the many stories from our clients such as that of our 100<sup>th</sup> placement, Jackie and Trinity:

## The Story of Jackie & Trinity



Jackie Barwick was 44 when she was diagnosed with type 1 diabetes in 2004. She had no idea how much her life would change; her health declined and she was admitted to hospital on numerous occasions. Understandably she lost a lot of confidence, and didn't feel able to venture out on her own for fear of having a hypo (hypoglycaemia or low blood glucose).

Enter three year-old Trinity, a beautiful black Labrador. Before Jackie was matched with Trinity, she was introduced to several dogs, and had another dog for a few months, but her sugar levels were so erratic that it was difficult for him to keep alerting her. Trinity has only been trained to pick up Jackie's low blood glucose levels for the time being, and is doing incredibly well.

When the pair met in early 2017, they clicked immediately. Jackie remembers that Trinity came into the room with a "big wagging tail and full of life". Trinity

even detected Jackie's low blood glucose level, which made Jackie cry tears of joy. Later that same day, Jackie and her husband, Ricky, took Trinity to a nearby hotel and stayed there with her for two days, before taking Trinity to their home in Hull for a further five days. They then had to return her to the charity for six weeks in order for Trinity to undergo scent training using Jackie's sample scents.

Trinity finally came home to Hull in March 2017. She lives with Jackie and Ricky and their elderly dog, Sky. Jackie and Ricky's three grown-up children and six grandchildren visit often, and Trinity is a much-loved member of the family. Trinity also has regular trips to the North Yorkshire moors, as Jackie and Ricky have a static caravan there.

Jackie's father sadly died last December. He loved dogs and Jackie believes that he sent Trinity to her – that their match was meant to be. With Trinity by her side she now feels confident to leave the house and so has regained her independence. Her fears of the unknown are slowly subsiding, and her husband is now more assured of his wife's wellbeing, knowing that Trinity is with her.

Trinity is a very loving and caring dog, who enjoys lots of cuddles. She loves ball games and watching TV and the beach is one of her favourite places. Although Trinity has a fun side, she takes her job seriously. Jackie says that Trinity's alerting is amazing and has to be seen to be believed. "She tends to come over to me and will sit and stare. If I don't react she will start to whimper, which gets louder until she makes a woof". Jackie will then test her blood glucose levels.

Trinity has made a huge difference to Jackie's life, and Jackie says she can never thank the Medical Detection Dogs team enough. Jackie is really proud of Trinity, saying that it's Trinity "who needs to be recognised, not me. She's the one doing all the work".

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

#### **Before Trinity**

- · 15 blood tests per day
- · Three hypos per day
- · Two ambulance call-outs per month
- Could never venture out alone
- · No holiday for ten years

#### With Trinity

- · 123 alerts in four months
- · No hospital visits
- · No ambulance call-outs
- Confident to go out alone to most places
- Planning a visit to Disneyland Paris

#### Highlights of the past year

During the year we were successfully re-accredited as a provider and trainer of assistance dogs by Assistance Dogs International. The reaccreditation process is a comprehensive audit of all our policies and procedures and looks at all aspects of the service we provide from training, pairing of the dog to the client and aftercare that we provide. It was a lengthy exercise and we passed with flying colours.

We also met our target to increase to 24 the number of dogs placed in the last year and have now achieved the significant milestone of having placed 100 dogs in total.

Among the dogs placed over the past year are the second partnership in Scotland, the first dog alerting a client with CCHS has been trained and accredited and also the first dog, Billy, trained and accredited to support Kate who suffers from Hemiplegic Migraines as a result of a series of strokes. This is their story:

## The Story of Kate & Billy



Billy the Labrador puppy came in to Kate's life in the summer of 2014 when her husband felt that Kate's morale had reached a low point as a consequence of a severe stroke.

The stroke, in 2014, left Kate with physical difficulties, and, unable to continue working she was struggling to maintain her independence. Kate's husband felt that having the companionship of a family pet would be beneficial for Kate's emotional health and wellbeing.

Unfortunately not long after Billy joined the family Kate suffered three further mini strokes. Devastatingly, despite heart surgery, it was subsequently discovered that the strokes had permanently damaged Kate's brain and left her suffering with Hemiplegic Migraines. This condition caused Kate frequent attacks that resembled a stroke – left sided weakness, drooping face, speech problems and confusion – symptoms that strangers often assumed were alcohol related. Kate was having these attacks up to five times day and the more they continued the less she felt she had a life.

Her fear of an attack meant she became virtually housebound and her family were equally fearful of

leaving her at home on her own. The few times she ventured outside she felt extremely vulnerable, never knowing when an attack might happen, and if one did, often being left in the street unaided. Despite these personal trials Kate had managed to keep up with Billy's regular puppy training classes and her dog trainer

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

suggested she contact Medical Detection Dogs when she noticed how exceptionally in tune with Kate Billy was. As time went on her trainer started noticing that sometimes Billy was not listening to Kate but was instead sitting down or pawing at her, and she firmly believed that Billy was trying to tell Kate something.

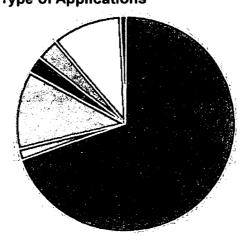
Kate was very sceptical but contacted us. We were very open to helping, despite not having had any previous experience of Kate's condition and invited Kate and Billy to Great Horwood. It was there that staff were able to see Billy working first hand as Kate suffered an attack on site.

The training programme concentrated on fine tuning Billy's behaviour and sharpening Kate's ability to recognise his alerts. In addition they began the public access training and worked on building up Billy's recorded public hours to enable Billy to become a fully qualified alert assistance dog.

Kate's life now is totally different. Because of Billy she can manage her medication enabling her to go for a whole day without a serious attack or severe pain. She has the confidence to go out and about on her own, in short, get back to being a normal wife and mum. "I feel a completely different person. It has made a massive difference to my and my family's lives. I felt so vulnerable before I had Billy. If I had an attack in public anyone could have taken anything, or done anything to me. I can't underestimate the amount of confidence he has given me. I feel he is protecting me. I would be totally and utterly lost without Billy".

#### Looking forward

Interest in our service grew throughout the past year, as did the number of applications for a medical alert assistance dogs from people with a variety of medical conditions as you can see from diagram 2 below.



Type of Applications

- Blood Glucose
- Drop Attacks
- \* Addisons/Cortisol Deficiency/ Non Epileptic Seizures/ Sheehan's Syndrome/ Panhypopituatrism/Epilepsy
- Allergies
- Narcolepsy/Cataplexy/Idiopathic Hypersomnia/CCHS
- POTS/Syncopy/Complicated Migraines
- Dual dog

Diagram 2: Conditions of those who have applied

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

We now have a waiting list of 115 people, from throughout the UK as you can see from diagram below. To help meet this need we have again increased our target for the year ahead, which is to place 29 dogs.

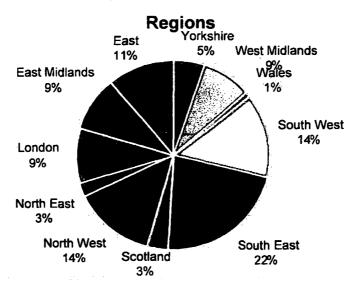


Diagram 3: Geographical spread of applicants for assistance dogs

Our service includes the provision of 24/7 support to all our partnerships. Over the past year we have continued to develop our national network of aftercare support providers, which now covers much of the UK. Our initial assessment of this expanded network is that it is having a beneficial effect on the service we provide. Our objective is that most clients will have trained support within approximately an hour from their home to reduce the time and stress involved in travelling.

We continued to work on our longitudinal study 'Does the presence of a diabetes alert dog reduce the diabetes-related anxiety in clients with hypoglycaemia unawareness?'. This looks at the effects of a medical alert assistance dog on the quality of life and fear of hypoglycaemia in clients with Type 1 Diabetes with reduced hypoglycaemic awareness and we look forward to publishing the results.

#### **Our International Work**

We continue to maintain a high profile internationally and have been invited to speak at conferences around the world including the USA and Canada. We are acknowledged as national and international leaders in the field, and are frequently asked to train and advise other groups worldwide. We are increasingly being approached about providing working bio-detection dogs for various diseases in a variety of environments; requests that although we currently do not have the capacity to undertake, we hope to be in a position to do so at some point in the future.

Our Chief Executive was asked to join the board of Assistance Dogs EU, the European chapter of Assistance Dogs International, which is dedicated to supporting the work of assistance dog-programmes across-Europe. In this role she will play a role in maintaining high standards of welfare and help to coordinate best practice in assistance dog training.

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

#### **Future Plans**

We are regularly approached to collaborate with other research organisations and charities and there are a number of potential research projects we would like to commence. Discussions continue with relevant clinicians for ovarian and lung cancer work. We remain hopeful that we will be able to progress these over the next few years but we are restricted by both a lack of space and of funding. We hope to tackle the first of those in the coming year which should see us break ground on the building of new dog training facilities and the refurbishment of our existing space to provide more Bio-Detection capacity. We have raised a considerable amount of the funding required for the new buildings and are incredibly grateful to many of our supporters too numerous to name, although particular thanks must go to our co-founder and recently retired trustee John Church whose family company has generously supported the development. We hope the new building will be ready for our tenth birthday celebrations in 2018.

In addition to expanding our collaborations with clinicians and academic partners to investigate the potential of dogs to detect the odour of human disease and to help develop early diagnosis techniques in all cases we intend to continue to increase the number of medical alert assistance dogs we are able to train from 24 in the year just ended to 29 in 2017/18. We expect that the majority of the assistance dogs we train will be diabetes alert dogs but that we will also train dogs to detect conditions which we have not previously worked with.

#### **Public Awareness**

We are committed to educating the public about the results of our research and the potential of dogs to detect human disease. We run a regular series of open days for the public and our supporters at our headquarters in Great Horwood as well as talks and presentations around the country for which we rely on our network of enthusiastic and dedicated volunteers.

Our website, which is a key means of educating the public about our work and provides a resource for people who need our services, was revised last year to improve navigation and to make updating information easier. The revised site was launched in February 2016 since when there has been a 19% increase in the number of new visitors to the site and a similar increase in the amount of time each visitor spends on the site. We are greatly encouraged by this evidence that the public finds it easier to obtain information about our work and services and are engaged with our activities.

As part of our efforts to engage with the public we have also increased our social media presence, using it as a means to direct people to the information on the website. This effort has resulted in a rise of 89% in the number of social media users who link through to the website from their social media platform of choice.

Most new visitors to the site are UK based (78%). Almost 10% of new visitors come from the USA and while Canada only accounts for 1.5% of new visitors over this period, this represents a 40% uplift in interest from Canadian visitors.

Going forward the trend is positive and with more work being done to develop the site over the coming months, including a more dynamic diary/events page and further refinements to the content.

We also continued to generate a lot of media interest with coverage nationally and internationally, in the printed press, their online counterparts and on TV and radio, which helps to further public understanding and awareness of the potential of our work.

For example, in May 2016, the announcement of our forthcoming malaria trial was covered by BBC News, BBC World Service, CNBC, CNN and CCTV Africa, as well as the Daily Mail and the Independent. More coverage is expected in the latter part of 2017 when the dogs have started and made progress on the trial.

The publication of Daisy's Gift in August 2016 gained publicity in The Sun, Mail Online, Daily Mirror, the Irish Times and a host of regional publications. Claire Guest was interviewed on BBC South Today, ITV This Morning, ITV Good Morning Britain and a number of regional radio stations.

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

Our Ambassadors provided further publicity for the charity. Lesley Nicol talked about the charity in an update on her career in the Daily Express, while Kate Humble described Claire Guest's extraordinary work in an article published in May 2016. New ambassador Jo Malone made headlines with her ability to smell much lower concentrations than most humans. The Daily Mail, Mail Online, The Sun and Daily Express covered her story, while ITV Good Morning Britain staged a test of her smelling power in comparison to bio detection dog Ozzie's with Claire Guest interviewed to explain the charity's work.

The story of Faith the rescued South Korean dog captured the public's imagination in January-February 2017 and the Mirror and Channel 5 covered Faith's arrival at MDD.

Throughout there has been a continued interest in the charity's cancer detection work. Sky News came in December 2016 to film an update on the prostate cancer trial. Our Chairman, Betsy Duncan Smith was the subject of a prominent feature in the Daily Mail with her personal story of how her cancer link led her to become involved in Medical Detection Dogs.

Medical alert assistance dogs generally received coverage at a more local media level, but Alice Halstead and Holly's story made the Mail Online, while Claire Moon was featured in Daily Telegraph in an article about Cambridge University identifying isoprene as the chemical dogs smell when they detect low blood sugar levels.

We anticipate further media coverage of our work in the coming year 2017-18 with announcements about our Parkinson's, malaria and pseudomonas studies expected.

### **Fundraising**

The fundraising climate continues to be challenging and the spotlight on charities' fundraising practices and their governance has reinforced the importance of adhering to our values in all of our activities. At all times we ensure our fundraising practices do not cause offense or nuisance to our current or potential donors. All fundraising activity takes place in house, so we have total control of how it is performed. The charity has received no complaints regarding its fundraising methods.

Despite the ongoing adverse fundraising climate over the last year, our total income for the year was over 25% up on the previous year, demonstrating the beneficial effect of our profile continuing to rise and our relentless focus on securing income to fund our work.

Our Ambassadors Kate Humble did a fantastic job presenting the televised BBC Lifeline appeal which was broadcast in November 2016. We hope that in addition to raising funds for the charity it will be valuable in raising public awareness of our work and its potential.

#### **Public Benefit**

The trustees confirm that they have complied with the duty in the Charities Act 2011 to have due regard to the Charity Commission's general guidance on public benefit

## Volunteers

We acknowledge that the mission of Medical Detection Dogs is only achieved through the diligence and dedication-of-our-increasing-number-of-volunteers.—The-volunteers-are-involved-in-all-areas-of-our-work-and include trustees, volunteer fundraisers, puppy walkers, part-time fosterers, speakers, administrators, drivers and many more. Without this group of committed individuals, Medical Detection Dogs would not have accomplished its current standing whilst maintaining costs at a very low level. All our assistance dogs require a minimum of one year in a volunteer's home, where they are placed as puppies and learn all the social skills required of a fully accredited assistance dog. Our bio-detection dogs are fostered full-time as we have a complete no kennel policy for all our dogs. We have increased the number of bio-detection dogs in training and rely even more on local volunteers to foster our dogs and their good will in bringing the dogs into work every day.

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

In order to support and grow our network of volunteers we have been joined by a new volunteer co-ordinator and a new assistant volunteer-coordinator. They have been responsible for an exercise to contact all our volunteers and ensure that we have accurate data about their involvement with the charity. Together they have also helped to improve our recruitment and training of volunteers as well as grown the number of regional branches of volunteers across the country who are engaged in raising awareness, giving talks and fundraising within the community. These volunteers are crucial for the development and growth of the charity.

Our mission throughout the charity:
Volunteers are highly valued and appreciated
Volunteers are central to our business strategy
Volunteers have the resources and support they need, are engaged with and supported by the charity
Volunteer contributions are recognised and rewarded
Staff fully integrate volunteers into their departments

#### **FINANCIAL REVIEW**

#### Outcome 2016/17

The charity has again had a good year financially, with a significant increase in income, rising to £1,861,691 up from £1,474,352 in the previous year. Our planned expansion of our operations continued throughout the year, with an additional £324,363 spent on charitable activities. We have finished the year with a financial surplus of £476,701. This surplus has largely been allocated to the fund that will finance our much needed new build project, which will result in the expansion of our premises in Great Horwood.

The fundraising environment for charities has been difficult in recent years, so we see this result as testament to our ability to convince the public of the value of our work, both now, through our assistance dog programme and in the future with our research in to the detection of cancer and other diseases.

Our income was boosted by the fantastic donation of £300,000 from CoBird, a company associated with former Trustee John Church's family.

The charity raises funds from many different sources including grants from trusts and foundations, corporate donations, donations from the general public and sponsoring puppy training. Many donors specify the areas of our charitable activities where they would like the money to be used. All our income is directed to supporting our key objectives of research into the detection, recognition and diagnosis of decease and medical conditions; and providing medical assistance dogs to clients who suffer from life threatening medical conditions.

## **Future Financial Plans**

We continue to strive to increase the number of assistance dogs placed with our clients year on year but our waiting list still grows. We are also commencing new research projects into cancer and disease detection. Although we've been successful in expanding both areas significantly in recent years, there is still demand for more.

Despite recently renting small additional premises, our need to accommodate our expansion has become acute. We are poised to break ground for the build of our new premises at our Great Horwood site and the majority of restricted and free reserves are destined to finance this. It will be built in a number of phases and the timing of this is subject to the availability of funds.

During the coming year we will again increase our expenditure in line with our growth plans. This year it will be by £480,000. We are proud that almost all of this increase is for additional resources to train and place our assistance dogs, to look after our ever increasing number of assistance dog partnerships and to fund additional research programmes.

# Report of the Trustees for the year ended 31<sup>st</sup> March 2017

Our fundraising must continue to grow to allow us to complete future build phases and the planned expansion of our charitable activities, so the continued support of the public and charitable trusts and foundations is vital to our future.

**Reserves Policy** 

The charity holds reserves as a contingency against any future reduction in levels of income. Whilst we have good levels of confidence in our ability to continue to raise funds, we recognise there is no guarantee, so prudence is always exercised. We are conscious that our clients with assistance dogs rely on us for future care and support and as such we need to ensure our reserves are sufficient to cover a period of reduced income levels.

Our policy is to hold 6 to 9 months forecast expenditure in reserve. £667,611 of our restricted income is available to support our new build project. In order to meet our budgeted requirements for the new build the Trustees have allocated a further £217,000 of our reverses to this project. This leaves £1,451,000 available to cover our forecast expenditure reserve, which represents approximately 9 months cover. The Trustees feel this represents the correct balance bearing in mind our need to be cautious.

The Trustees review the reserves held against our policy criteria quarterly.

Reserves excluding fixed assets amount to £2,560,213 of which £891,187 is restricted.

## Report of the Trustees for the year ended 31<sup>st</sup> March 2017

#### STATEMENT OF TRUSTEES RESPONSIBILITIES

The trustees (who are also the directors of Medical Detection Dogs for the purposes of company law) are responsible for preparing the Report of the Trustees and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing those financial statements, the trustees are required to

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charity SORP;
- make judgements and estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in business.

The trustees are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the charitable company and to enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

In so far as the trustees are aware:

- there is no relevant audit information of which the charitable company's auditors are unaware; and
- the trustees have taken all steps that they ought to have taken to make themselves aware of any relevant audit information and to establish that the auditors are aware of that information.

This report has been prepared in accordance with the special provisions of Part 15 of the Companies Act 2006 relating to small companies.

ON BEHALF OF THE BOARD:

Betsy Duncan Smith - Trustee

Date 8th November, 2017

## Report of the Independent Auditors to the Members of Medical Detection Dogs (Registered Number: 06399500)

We have audited the financial statements of Medical Detection Dogs for the year ended 31 March 2017 which comprise the Statement of Financial Activities, the Balance Sheet, the Cash Flow Statement and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice) including FRS 102 "The Financial Reporting Standards applicable in the UK and Ireland".

This report is made solely to the charitable company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and to the charitable company's trustees, as a body, in accordance with section 44(1)(c) of the Charities and Trustee Investment (Scotland) Act 2005 and regulation 10 of the Charities Accounts (Scotland) Regulations 2006 (as amended). Our audit work has been undertaken so that we might state to the charitable company's members and its trustees those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charitable company, the charitable company's members as a body and its trustees as a body, for our audit work, for this report, or for the opinions we have formed.

## Respective responsibilities of trustees and auditor

As explained more fully in the Trustees' Responsibilities Statement set out on page 20 the trustees (who are also the directors of the charitable company for the purposes of company law) are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

We have been appointed as auditor under section 44(1)(c) of the Charities and Trustee Investment (Scotland) Act 2005 and under the Companies Act 2006 and report in accordance with regulations made under those Acts

Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

## Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the charitable company's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the trustees; and the overall presentation of the financial statements. In addition, we read all the financial and non-financial information in the Trustees' Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

## **Opinion on financial statements**

In our opinion the financial statements:

- give a true and fair view of the state of the charitable company's affairs as at 31 March 2017 and of its incoming resources and application of resources, including its income and expenditure, for the year then ended
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006, the Charities and Trustee Investment (Scotland) Act 2005 and regulation 8 of the Charities Accounts (Scotland) Regulations 2006 (as amended).

### Opinion on other matter prescribed by the Companies Act 2006

In our opinion based on work undertaken in the course of the audit:

- the information given in the Report of the Trustees' for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- The Report of the Trustees has been prepared in accordance with applicable legal standards.

### Matters on which we are required to report by exception

In light of our knowledge and understanding of the company and its environment obtained in the course of the audit we have not identified any material misstatements in the Report of the Trustees.

We have nothing to report in respect of the following matters where the Companies Act 2006 and the Charities Accounts (Scotland) Regulations 2006 (as amended) requires us to report to you if, in our opinion:

- the charitable company has not kept proper and adequate accounting records or returns adequate for our audit have not been received from branches not visited by us; of
- the financial statements are not in agreement with the accounting records and returns; or
- e certain disclosures of trustees' remuneration specified by law are not made; or
- · we have not received all the information and explanations we require for our audit. or
- the trustees were not entitled to prepare the financial statements in accordance with the small companies regime and take advantage of the small companies exemption in preparing the directors' report and take advantage of the small companies exemption from the requirement to prepare a strategic report.

Jill Andrews FCA (Senior Statutory Auditor)
For and on behalf of Ashby's, Statutory Auditor
Morton House
9 Beacon Court
Pitstone Green Business Park
Pitstone
LU7 9GY

Date: 8 November 2017

Ashbys is eligible to act as an auditor in terms of section 1212 of the Companies Act 2006.

## Statement of Financial Activities (Incorporating an Income and Expenditure Account) for the year ended 31st March 2017

·	Note	Unrestricted fund £	Restricted funds £	2017 Total funds £	2016 Total funds £
INCOME AND ENDOWMENTS FROM Donations and legacies	3	886,003	901,372	1,787,375	1,401,908
Other trading activities Investment income	4 5	69,613 4,703	3 <b>÷</b> ,	69,613 4,703	64,784 7,660
Total		960,319	901,372	1,861,691	1,474,352
EXPENDITURE ON Raising funds Charitable activities Dog training Dog placement and aftercare Cancer research projects	6 7	184,238 108,927 195,833 291,394	515,581 89,017.	184,238 624,508 195,833 380,411	164,243 540,569 156,027 179,793
Total		780,392	604,598	1,384,990	1,040,632
NET INCOME		179,927	296,774	476,701	433,720
RECONCILIATION OF FUNDS		,			
Total funds brought forward		2,027,019	594,413	2,621,432	2,187,712
TOTAL FUNDS CARRIED FORWARD		2,206,946	891,187	3,098,133	2,621,432

## **CONTINUING OPERATIONS**

All income and expenditure has arisen from continuing activities,

## Medical Detection Dogs (Registered number: 06399500)

### Balance Sheet At 31st March 2017

•					
	Non	Unrestricted fund	Restricted funds	2017 Total funds	2016 Total funds
	Note	£	£	£	£
FIXED ASSETS Tangible assets	13	537,920	er:	537,920	522,796
CURRENT ASSETS					
Stocks	14	12,926	ie¹	12,926	11,753
Debtors	15	145,124		145,124	101,112
Cash at bank and in hand	13	1,619,938	901.197	2,511,125	2,044,631
Cash at bank and in hand		1,019,930	891,187	2,311,123	2,044,031
		1,777,988	891,187	2,669,175	2,157,496
CREDITORS					
Amounts falling due within one year	16	(108,962)	Şa	(108,962)	(58,860)
		S artists (Automorphism)	<del>station district</del>	<del></del>	2-1-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
NET CURRENT ASSETS		1,669,026	891,187	2,560,213	2,098,636
TOTAL ASSETS LESS CURRENT					
LIABILITIES		2,206,946	891,187	3,098,133	2,621,432
		Section of the second sector			
NET ACCETO				0.000.400	0.004.400
NET ASSETS		2,206,946	<u>891,187</u>	3,098,133	<u>2,621,432</u>
FUNDS	18				
Unrestricted funds	10			2,206,946	2,027,019
Restricted funds				891,187	594,413
nestricted futius				0315107	<del></del>
TOTAL FUNDS				3,098,133	2,621,432

These financial statements have been prepared in accordance with the special provisions of Part 15 of the Companies Act 2006 relating to small charitable companies.

The financial statements were approved by the Board of Trustees on .8th November, 2017. and were signed on its behalf by:

A Keegan -Trustee

E Duncan Smith -Trustee

The notes form part of these financial statements

## Cash Flow Statement for the year ended 31st March 2017

Cook flavo from anaustian activities.	Note	2017 £	2016 £
Cash flows from operating activities: Cash generated from operations	1	514,345	429,192
Net cash provided by (used in) operating activities	l	514,345	429,192
Cash flows from investing activities: Purchase of tangible fixed assets Interest received		(52,554) 4,703	(23,453) 7,660
Net cash provided by (used in) investing activities		<u>(47,851</u> )	(15,793)
Change in cash and cash equivalents in tereporting period  Cash and cash equivalents at the beginn		466;494	413,399
of the reporting period	ıııg	2,044,631	1,631,232
Cash and cash equivalents at the end of reporting period	the	<u>2,511,125</u>	2,044,631

# Notes to the Cash Flow Statement for the year ended 31st March 2017

Increase in creditors

Net cash provided by (used in) operating activities

1.:	RECONCILIATION OF NET INCOME TO NET CASH FLOW FROM OPERATING ACTIVITIES				
٠.		2017	2016		
		£	£		
	Net income for the reporting period (as per the statement of				
	financial activities)	476,701	433,720		
	Adjustments for:				
	Depreciation charges	37,430	25,137		
	Interest received	(4,703)	(7,660)		
	(Increase)/decrease in stocks	(1,173)	2,039		
	Increase in debtors	(44,012)	(34,799)		

Notes to the Financial Statements for the year ended 31st March 2017

#### 1. CHARITY INFORMATION

Medical Detection Dogs is a private company limited by guarantee incorporated in England and Wales. The registered office is Unit 3, Millfield, Greenway Business Park, Winslow Road, Great Horward, Milton Keynes, MK17 0NP. The charity is a public benefit entity.

#### 2. ACCOUNTING POLICIES

### Basis of preparing the financial statements

The financial statements of the charitable company, which is a public benefit entity under FRS 102, have been prepared in accordance with the Charities SORP (FRS 102) 'Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015)', Financial Reporting Standard 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland' and the Companies Act 2006. The financial statements have been prepared under the historical cost convention.

The financial statements are prepared in sterling which is the functional currency of the charity. Monetary amounts have been rounded to the nearest £.

The trustees consider that there are no material uncertainties about the charity's ability to continue as a going concern.

The charity has taken advantage of the following disclosure exemptions in preparing these financial statements, as permitted by FRS 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland':

- the requirements of Section 11 Financial Instruments paragraphs 11.41(b), 11.41(c), 11.41(e), 11.41(f), 11.42, 11.44,11.45, 11.47, 11.48(a)(iii), 11.48(a)(iv), 11.48(b) and 11.48(c);
- the requirements of Section 12 Other Financial Instruments paragraphs 12.26, 12.27, 12.29(a), 12.29(b) and 12.29A.

The financial statements contain information about Medical Detection Dogs as an individual charity and do not contain consolidated financial information as the parent of a group. The charity's subsidiary has net assets amounting to £1, has never traded and has therefore been excluded from consolidation on the grounds of immateriality in accordance with Section 405(2) of the Companies Act 2006.

### First time adoption of FRS 102

The transition to FRS 102 did not result in any adjustments to comparative amounts.

#### Income

All income is recognised in the Statement of Financial Activities once the charity has entitlement to the funds, it is probable that the income will be received and the amount can be measured reliably.

#### Donations

Donations are brought into the financial statements when the asset is deposited into the bank. The gift aid tax which is claimable on these donations is recognised upon receipt of the donation.

### Legacies

Legacies will be recognised as income by the charity when it has received sufficient certainty the legacy will be received.

The Charity benefits greatly from the involvement and support of its many volunteers. In accordance with FRS 102 and the Charities SORP (FRS 102), the economic contribution of general volunteers is not recognised in the accounts.

## Notes to the Financial Statements - continued for the year ended 31st March 2017

#### 2. ACCOUNTING POLICIES - continued

#### Expenditure

Liabilities are recognised as expenditure as soon as there is a legal or constructive obligation committing the charity to that expenditure, it is probable that a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably. Expenditure is accounted for on an accruals basis and has been classified under headings that aggregate all cost related to the category. Where costs cannot be directly attributed to particular headings they have been allocated to activities on a basis consistent with the use of resources.

### Allocation and apportionment of costs

Support costs are allocated to the charity's principal charitable activity...

#### Tangible fixed assets

Depreciation is provided at the following annual rates in order to write off each asset over its estimated useful life.

Freehold property

- 2% on cost

Fixtures and fittings

- Straight line over 3 years

The charity has a policy of not capitalising any item that costs less than £1,000.

#### Stocks

Stocks are valued at the lower of cost and net realisable value, after making due allowance for obsolete and slow moving items.

#### **Taxation**

The charity is exempt from corporation tax on its charitable activities.

#### Fund accounting

Unrestricted funds can be used in accordance with the charitable objectives at the discretion of the trustees.

Restricted funds can only be used for particular restricted purposes within the objects of the Charitycharity. Restrictions arise when specified by the donor or when funds are raised for particular restricted purposes.

Further explanation of the nature and purpose of each fund is included in the notes to the financial statements.

## **Donated goods**

Gifts in kind donated are included at the valuation at the time of the gift.

#### Cash at bank and in hand

Cash at bank and in hand includes cash held in short term deposit accounts or accounts with instant access.

### Pension\_costs\_and\_other\_post-retirement-benefits-

The charitable company operates a defined contribution pension scheme. Contributions payable to the charitable company's pension scheme are charged to the Statement of Financial Activities in the period to which they relate.

### Hire purchase and leasing commitments

Rentals paid under operating leases are charged to the Statement of Financial Activities on a straight line basis over the period of the lease.

## Notes to the Financial Statements - continued for the year ended 31st March 2017

3. DONATIONS AND LEGAC
------------------------

	2017	2016
	£	£
Donations	1,693,569	1,391,617
Legacies	93,806	10,291
<del>-</del>	\$	\$
	<u>1,787,375</u>	1,401,908
	· · · · · · · · · · · · · · · · · · ·	1

Income from donations includes donated dog food and dogs. The value of these donations to the charity is estimated at £37,400 and is recognised within incoming resources as a donation and an equivalent charge is included in charitable activities.

## 4. OTHER TRADING ACTIVITIES

	Fundraising events Christmas card and merchandise sales Bedbug detection Bio Detection Conference Cat detection project	2017 £ 29,962 31,411 <u>8,240</u> 69,613	2016 £ 30,087 25,394 1,032 8,271
5.	INVESTMENT INCOME		
		2047	0040
	·	2017 £	2016 £
	Deposit account interest	4,703	7,660
6.	RAISING FUNDS		
	Raising donations and legacies		
		2017	2016
	Outsourced services	£ 19,794	£ 11,730
	Wages	70,203	71,667
	Marketing & PR	31,409	30,045
	Event costs	14,503	16,941
	Website	68	1,356
	Travel	10,622	7,741
	Online giving admin fees	5,787	5,932
	Printing	8,717	5,892

161,103

151,304

# Notes to the Financial Statements - continued for the year ended 31st March 2017

6.	RAISING FUNDS - continued				
	Other trading activities		•		
	Purchases			2017 £ 23,135	2016 £ _12,939
		•			ىلانىيىنىنىيىسىدە دەنە
	Aggregate amounts			184,238	<u>164,243</u>
<b>7</b> .	CHARITABLE ACTIVITIES COSTS				
			Direct costs	Support costs (See note 8)	Totals
	Dog training Dog placement and aftercare		£ 484,542 152,056	£ 139,966 43,777	£ 624,508 195,833
	Cancer research projects		310,853	69,558	380,411
			<u>947,451</u>	253,301	1,200,752
8.	SUPPORT COSTS				
		Management £	Finance £	Governance costs £	Totals £
	Dog training Dog placement and aftercare	135,220 42,292	1,991 623	2,755 862	139,966 43,777
	Cancer research projects	67,199	989	1,370 1,087	69,558
		<u>244,711</u>	3,603	4,987	253,301

Support costs, included in the above, are as follows:

# Notes to the Financial Statements - continued for the year ended 31st March 2017

## 8. SUPPORT COSTS - continued

Management					
•		_	_	2017	2016
		Dog	Cancer		
	Dog training	placement	research	Total	Takal
	Dog training	and aftercare	projects	Total activities	Total
	£	£	£	£	activities £
Rent and rates	1,291	404	642	2,337	2,189
Insurance	9,048	2,830	4,497	16,375	15,272
Water and electric	5,088	1,591	2,528	9,207	6,642
Telephone	2,217	693	1,101	4,011	5,301
Postage and stationery	10,463	3,272	5,199	18,934	23,295
Sundries	2,965	927	1,474	5,366	4,813
Repairs	5,134	1,606	2,551	9,291	10,022
Travel	146	46	73	265	137
Legal & professional	8,598	2,689	4,273	15,560	3,238
Recruitment	2,386	746	1,186	4,318	2,328
Information technology					
costs	8,002	2,503	3,977	14,482	10,791
Administration services Depreciation of tangible	59,200	18,515	29,420	107,135	67,453
and heritage assets	20,682	6,470	10,278	37,430	25,137
	135,220	42,292	67,199	244,711	<u>176,618</u>
Finance					
				2017	2016
		Dog	Cancer		
		placement	research		
	Dog training	and aftercare	projects	Total	Total
	_	<u> </u>		activities	activities
Donle shares	£	£	£	£	£
Bank charges	<u>1,991</u> ,	623	989	<u>3,603</u>	2,974
Governance costs					
				2017	2016
		Dog	Cancer		
		placement	research		
	Dog training	and aftercare	projects	Total	Total
	•	•	_	activities	activities
Auditoral romanoantica	£	£	£	£	£
Auditors' remuneration Auditors' remuneration	1,249	390	621	2,260	3,718
for non audit-work	276-	87	137	500	
CRB checking costs	696	218	346	1,260	1,049
Board meeting costs	534	<u>167</u>	<u>266</u>	<u>967</u>	<u>2,093</u>
	2,755	862	<u>1,370</u>	<u>4,987</u>	6,860

## Notes to the Financial Statements - continued for the year ended 31st March 2017

### 9. NET INCOME/(EXPENDITURE)

Net income/(expenditure) is stated after charging/(crediting)?

2017	2016
£	£
2,260	3,718
500	
37,430	25,137
	£ 2,260 500

## 10. TRUSTEES' REMUNERATION AND BENEFITS

There were no trustees' remuneration or other benefits for the year ended 31st March 2017 nor for the year ended 31st March 2016.

## Trustees' expenses

Trustees travel costs to attend board meetings amounting to £nil (2016 - £1,338) were reimbursed to none of the trustees (2016 - 1 trustee).

#### 11. STAFF COSTS

	2017 £	2016 £
Wages and salaries	689,470	582,338
Social security costs	53,663	45,592
Pension costs	10,873	
	754,006	627,930

The average monthly number of full-time equivalent employees (including casual and part-time staff) during the year was 36 (2016 - 30).

The average monthly number of employees during the year was as follows:

	2017	2016
Executive	1	1
Dog trainers	12	9
Dog placement	8	9
Bio detection	5	5
Fundraising	1	1
Administrative support	9	10.
	36	35.

The number of employees whose employee benefits (excluding employer pension costs) exceeded £60,000 was:

	2017	2016
£80,001 - £90,000	1	1.

Pension costs are allocated to activities and between restricted and unrestricted funds in proportion to the related staffing costs incurred.

## 12. COMPARATIVES FOR THE STATEMENT OF FINANCIAL ACTIVITIES

INCOME AND ENDOWMENTS FROM Donations and legacies	Unrestricted fund £	Restricted funds £	Total funds £ 1,401,908
Other trading activities Investment income	34,697 7,660	30,087	64,784 7,660
Total	1,064,394	409,958	1,474,352
EXPENDITURE ON Raising funds Charitable activities	164,243	ė:	164,243
Dog training Dog placement and aftercare Cancer research projects	113,839 69,352 77,195	426,730 86,675 102,598	540,569 156,027 
Total	424,629	616,003	1,040,632
NET INCOME	639,765	(206,045)	433,720
Transfers between funds	7,445	(7;445)	<del> </del>
Net movement in funds RECONCILIATION OF FUNDS	647,210	(213,490)	433,720
Total funds brought forward	1,379,809	807,903	2,187,712
•	: <del></del>		
TOTAL FUNDS CARRIED FORWARD	2,027,019	<u>594,413</u>	2,621,432

# Notes to the Financial Statements - continued for the year ended 31st March 2017

13.	TANGIBLE FIXED ASSETS				
		Freehold property	Fixtures and fittings	Motor vehicles	Totals
	0007	£	£	£	£
	COST At 1st April 2016 Additions	535,162 8,507	56,866 16,599	27,448	592,028 52,554
	At 31st March 2017	543,669	73,465	27,448	644,582
	DEPRECIATION				
	At 1st April 2016	32,135	37,097	( <u>1</u> )	69,232
	Charge for year	10,835	<u>17,426</u>	9,169	37,430
	At 31st March 2017	42,970	_54,523	9,169	106,662
	NET BOOK VALUE			•	
	At 31st March 2017	500,699	18,942	18,279	537,920
	At 31st March 2016	503,027	<u>19,769</u> .		522,796
14.	STOCKS				
				2017	2016
	Stocks			£ 12,926	£ . <u>11,753</u>
15.	DEBTORS				
				2017 £	2016 £
	Amounts falling due within one year: Other debtors			70,812	79,370
	Prepayments and accrued income			66,842	21,742
				137,654	<u>101,112</u>
	Amounts falling due after more than one year:				
	Other debtors			7,470	
	Aggregate amounts			<u>145,124</u>	101,112

16.	CREDITORS: AMOUNTS FALLING DUE	WITHIN ONE YEAR	•	•
	Trade creditors Social security and other taxes Other creditors Accruals and deferred income		2017 £ 43,321 21,378 720 43,543	2016 £ 29,962 13,590 1,301 14,007
			108,962	58,860
17.	LEASING AGREEMENTS			
	Minimum lease payments under non-cancellable operating leases fall due as follows:			
	Within one year Between one and five years		2017 £ 12,744 	2016 £ 16,777 12,614
			20,715	29,391
18.	MOVEMENT IN FUNDS			
		At 1/4/16	Net movement in funds	At 31/3/17
	Unrestricted funds	£	£	£
	General fund	2,027,019	179,927	2,206,946
	Restricted funds Cancer Studies Scottish Employee Fund Name a Puppy Medical Alert Assistance Dogs Bio Detection Conference Sylvia Fund Staff fund Equipment Fund Breast Cancer Study New build project Dog training	36,859 17,455 32,938 4,000 11,213 422,555 50,000 19,393	(27,511) (17,455) 46,113 (1,450) (54,944) (50,000) (12,641) 17,500 300,000 97,162	9,348 79,051 2,550 11,213 367,611 6,752 17,500 300,000 97,162
	TOTAL FUNDS	<u>2,621,432</u>	476,701	3,098,133

Notes to the Financial Statements - continued for the year ended 31st March 2017

#### 18. MOVEMENT IN FUNDS - continued

Net movement in funds, included in the above are as follows:

	Incoming resources £	Resources expended £	Movement in funds £
Unrestricted funds			
General fund	960,319	(780,392)	179,927
Restricted funds			
Cancer Studies	78,634	(106,145)	(27,511)
Name a Puppy	104,709	(58,596)	46,113
Medical Alert Assistance Dogs	131,448	(132,898)	(1,450)
Equipment Fund	14,400	(27,041)	(12,641)
Breast Cancer Study	19,500	(2,000)	17,500
Prostate Cancer	65,691	(65,691)	
Business Director	25,000	(25,000)	₽
Bio Equipment	6,530	(6,530)	.≅∙
New build project	300,000	<del>.</del>	300,000
Malaria study	500	(500)	· ·
Dog training	154,960	(57,798)	97,162
Scottish Employee Fund	- <del></del>	(17,455)	(17,455)
Sylvia Fund	. <del>*</del> e	(54,944)	(54,944)
Staff fund	-	(50,000)	(50,000)
	901,372	(604,598)	296,774
		<u>,</u>	
TOTAL FUNDS	1,861,691	(1,384,990)	476,701

Cancer studies - restricted to expenditure relating to cancer research

Scottish Employee Fund - restricted to expenditure for a staff member to cover Scotland

Name a Puppy - restricted to expenditure relating to the training of named medical alert assistance dogs or cancer research dogs

Medical Alert Assistance Dog Fund - restricted to expenditure on training and placement of medical alert assistance dogs generally

Bio Detection Conference - restricted to expenditure on the conference

Sylvia Fund - restricted to securing the charity's premises, the cost of studies into breast cancer and prostate cancer and the cost of training more detection dogs

Staff Fund - restricted to the funding of strengthening our administration staff over a three year period Equipment Fund - restricted to the purchase of specific items of equipment

Breast cancer study - restricted to expenditure relating to breast cancer research

Bio Equipment Fund - restricted to the purchase of specific items of bio equipment

New Build Project Fund - restricted to the costs of the new buildings

Dog Training Fund - restricted to the cost of training dogs

Prostate Cancer - restricted to expenditure relating to prostate cancer research

Business Director - restricted to expenditure related to the staff post of Business Director

Notes to the Financial Statements - continued for the year ended 31st March 2017

#### 19. RELATED PARTY DISCLOSURES

An interest free loan of £12,000 was made to the Chief Executive Officer Claire Guest during the year for the purchase of a car. The balance owed to the charity as at 31 March 2017 was £10,950 (2016 - £2,430).

The key management personnel of the charity are the Chief Executive Officer and the Chief Operating Officer whose combined employee benefits total £110,478 (2016 - £79,704).

### 20. COMPANY LIMITED BY GUARANTEE

The liability of each member is limited to £10 by guarantee